

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF MARINE SAFETY

In the Matter of:

"FIRE ON BOARD M/V COLUMBIA"

Docket No.:
DCA00MM030

Recorded Interview CHARLES LAWRENCE.

Drydock

Wheel House Alaska Shipyard and

Juneau Ketchikan, Alaska

June 15, 2000

BEFORE:

TOM ROTH ~~PROPER~~ ROTH-ROFFY,
NTSBP

TABLE OF CONTENTS

WITNESS:	PAGE
Patrick Wickens	3

P R O C E E D I N G S

1
2 MR. ROTHROPEROTH-ROFFY: My name is Tom
3 RethropeRoth-Roffy. I'm with the National
4 Transportation Safety Board. And we are conducting an
5 investigation of the accident that occurred aboard the
6 Motor Vessel Columbia last week.

7 And the purpose of our investigation is to
8 determine the cause of the switchboard incident, if we
9 can, and then based on cause, make recommendations to
10 prevent future occurrences of similar accidents.

11 Our investigation is strictly aimed at
12 safety. We have no legal powers, enforcement powers,
13 or we do not try to find fault with any person or
14 company. It's strictly to try to find out what
15 happened and to try to prevent it from happening again.

16 Okay, for the record, could you please state
17 your name?

18 MR. LAWRENCE: My name is Charles Lawrence.

19 E X A M I N A T I O N

20 BY MR. ROTHROPEROTH-ROFFY:

21 Q And your current occupation and employer?

22 A Currently, I work in cable parts products as
23 a maintenance electrician. We call it maintenance,
24 contained maintenance, installation, programming and
25 things of that nature.

1 Q And did you work on the Motor Vessel Columbia
2 during its repair period at Alaska shipyard drydock?

3 A Yes, I did.

4 Q And what sort of work did you do on the
5 Columbia?

6 A Initially, when the Columbia first arrived, I
7 basically ordered materials and sort of plotted out the
8 routing of cables and how to route them and how to run
9 them.

10 And, at that time, another guy came in and
11 took over, so he did the supervision of the job and we
12 did minor installations, such as CCTV, closed-circuit
13 television, water-intrusion alarm.

14 We installed the distribution panel for the
15 life-saving equipment and the gyro compass, which is a
16 navigation device.

17 Q Right. Okay.

18 A That was about the extent of our work.

19 Q So it seems like you were involved in most of
20 the jobs on the ship in the electrical area?

21 A Initially, overall, yes, I ran all the jobs
22 at one time in the beginning stages, which was
23 procurement of parts and materials and laying of the
24 job that would be done. Removal of lighting, things of
25 that nature.

1 But, as the other guy commented, I was placed
2 on the gyro installation, you know, specifically by
3 myself. I did that portion. And from that point, I
4 went to the water-intrusion alarm. And that was the
5 scope of my work at that time.

6 Q And who were you working with?

7 A Who was the supervisor?

8 Q Yes.

9 A My supervisor was -- what's his name? Dave
10 Johnson.

11 Q Okay. And can you tell me the names of some
12 of the other electricians you worked with?

13 A Sam Morrow.

14 Q Sam Morrow?

15 A Morrow, yeah.

16 Q Okay.

17 A Phil Parker, which is an electrician helper.

18 Calvin Prest~~u~~eon, who also was a helper to the
19 electrician. And Anthony James, who was a Marine
20 Electrician from down south.

21 Q Okay. Now you said Calvin Prespin --

22 A Preston, yeah.

23 Q Oh, Preston.

24 A Right.

25 Q Was a helper?

1 A Yes.

2 Q Was there another Calvin that was a lead man?

3 A Calvin that was a lead man? No. At least
4 not while I was here. I left before the boat left.

5 Q I had gotten a name that says Calvin as being
6 a lead man. Okay.

7 Now did you work on the -- you say you worked
8 on the power panel for the life-saving equipment. That
9 was up near the emergency diesel generator; is that
10 right?

11 A Uh-huh.

12 Q Could you describe the work that you did
13 there on that particular panel?

14 A Oh, I personally did?

15 Q Yeah.

16 A I didn't personally do any work on the panel.

17 Q Okay.

18 A Mr. Sam Morrow and Calvin Preston basically
19 installed -- along with Phil Parker, they removed the
20 old ~~LECO~~-panel and put in a new panel, which was
21 swapped out of the same material. Just a changeover
22 from one to the other. So they can accommodate two
23 more breakers in order to run the lifeboat davit and
24 the rescue boats.

25 Q Okay. But, you personally didn't work on

1 that particular --

2 A Not personally, no.

3 Q Okay, there was also a cable run from the
4 main switchboard up to that new panel. Did you work on
5 that?

6 A I assisted in pulling some of the cable, yes,
7 putting the cable part away, yes.

8 Q Did you work on the connection of the new
9 cable to the new breaker on the main switchboard?

10 A No. That was done by a guy -- oh, Gary
11 Turner was also there. I believe that was done by Mr.
12 Gary Turner -- I believe. If I'm not -- I wasn't here.
13 I was off that weekend.

14 Mr. Dave Johnson was there as, you know, the
15 supervisor to a procedure job.

16 I think Phil was there and Anthony James was
17 in that weekend.

18 Q Anthony James? ~~I thought these were~~ Wow, all
19 these electricians. Anthony James was also an
20 electrician; right?

21 A Right.

22 Q Could you just tell me who is an electrician
23 and who is a helper? You say Calvin Preston was a--

24 A Is a helper.

25 Q Sam Morrow?

1 A Sam Morrow is an electrician but, generally,
2 a residential electrician. But, a lot of the marine
3 aspect.

4 Anthony James is a Marine electrician. Phil
5 Parker is a helper. Calvin Preston is a helper. And
6 Mr. Dave Johnson is an electrician; a supervisor.

7 Q How about Gary Turner?

8 A He's not an electrician. He's a helper as
9 well. Sorry.

10 Q All right. So your involvement with this
11 particular job, installing the new power panel, running
12 the cable, connecting it to the -- or installing the
13 new breaker in the main switchboard, connecting all of
14 this stuff, you say -- what part of it do you say
15 you're involved with again?

16 A I helped pull the cable. I help seal the
17 fittings. You know, the transmission fittings for the
18 bulkheads, and things like that.

19 That's about really all I did, if I remember
20 correctly. Yeah, that's about all I did. I watched
21 them hook up the breakers to it. I didn't hook them
22 up. I had the guys, I had Sam hook them up because I
23 was, you know, in charge of that point there.

24 And we put it back on its original feeder,
25 which there was just one feeder going up there from the

1 old existing breaker, and everything functioned
2 properly.

3 Q So did you take the old 200 amp breaker out
4 of the main switchboard, or were you there when that
5 was done? Or did you assist in that process?

6 There was an existing 200-amp --

7 A Yeah, right. Yes.

8 Q You took that out?

9 A Yeah.

10 Q Did you work with somebody on that, or did
11 somebody work with you on that?

12 A No, I didn't pull it out. I purchased a
13 breaker. I located and purchased a breaker, but I did
14 not --

15 Q The new one, the 400 amp. What -- was that
16 an FPE? What was the manufacturer?

17 A Yes, Federal Pacific.

18 Q Are they still being made, those FPE
19 breakers?

20 A As new, no.

21 Q So where did you have to buy that from?

22 A California. They found it, I believe,
23 probably in Louisiana. I believe, if I'm not mistaken.
24 It was a refurbished breaker, but it's not brand-new
25 because you can't get them brand-new anymore.

1 Q Okay. So you helped with the procurement of
2 that breaker. Did you install that breaker?

3 A No. We didn't have it installed. They
4 installed it the night that they hooked up the ~~buzzing~~
5 bussing for it, --- the feeders, -- when they make
6 the switch, because you don't want to have a 400-amp
7 breaker on just to run 250 NCM.

8 So you have to wait until you get all the
9 cable ran, stabbed in. ~~on the cable ramp and stack~~
10 ~~then.~~

11 Q When they installed that new 400-amp breaker
12 -- I'm not following you -- they had the existing T-200
13 line.

14 A Right.

15 Q And they hooked it up to the new breaker?

16 A Right.

17 Q And I didn't follow you on the rest of it.
18 Did they also hook up the new cable to that at the same
19 time?

20 A Yes. That is what you call a parallel feed,
21 right. They hooked up both of them at that time, yeah.
22 And that would be the only time you would want to swap
23 the breakers out because you have more capability of
24 having drawn on your cable. And you would have a 400
25 on that 200 cable.

1 Q Okay, sure. Yeah, that makes sense.

2 A And so you divide it up on two branches, you
3 know. And so it splits the load on.

4 Q Were you involved in that part of the
5 operation?

6 A No, not as far as hooking it up, no.

7 Q Okay. Did the new cable -- it was routed
8 inside the switchboard. Did you help with pulling that
9 in there?

10 A No. I was too big to get in there.

11 Q Who was in there?

12 A I think it was Gary Turner. He's about the
13 smallest one that we have, I have~~or had~~.

14 Q So after they took the 200-amp breaker out,
15 put it in the 400 and connected both cables to the
16 output side, then did they power that back up then?

17 A Yes, I believe they did. It was all lined up
18 in Monday when I came into work.

19 Q And what did they do with the other end of
20 the new cable? Was that connected up also?

21 A Yes. It was connected up to the distribution
22 panel up in the emergency generator room at the other
23 end.

24 Q Okay. Because I had heard something from the
25 ship's crew that there was some kind of a problem when

1 they went to install that new cable into the new
2 distribution panel.

3 There was some kind of an accident that
4 occurred up there. Do you know anything about that?

5 A Yeah. After they had installed the cable and
6 hooked it up, they had forgotten to, how would you say,
7 secure the fitting where the cables enter the can, in
8 the distribution can up there. They forgot to secure
9 it with the locking nuts...

10 And they were trying to secure it hot, you
11 know. And, you know, with it round in there. And,
12 inadvertently, they chafed the cable through the sharp
13 edge of the enclosure. And it ~~retted~~ grounded out and
14 blew the breaker. Simple.

15 Burn up the cable, so they had to put a
16 splice in to, you know, fix that.

17 Q So they blew the breaker on the main
18 switchboard?

19 A Yes, for that... out-breaker.

20 Q And do you know who was doing that job at
21 that time, who was involved in that?

22 A If memory serves me correctly, it would be
23 Sam Morrow and Calvin.

24 Q Okay.

25 A By direct of Mr. Johnson.

1 Q You say directed or supervised?

2 A Yes.

3 Q Supervised by Dave Johnson?

4 A Yes, Dave Johnson.

5 Q So the electrical work that you personally
6 performed was the cable TV's system installation?

7 A Portions.

8 Q Portions of that, okay.

9 A Basically, running cable, cutting
10 penetrations, things of that nature. I've also worked
11 on the gyro installation. I did the majority of that.
12 All that the tech rep didn't do, I did the majority
13 of.

14 I ran most of the stuff for the ~~morning-water~~
15 intrusion alarm and the door-monitoring system.

16 Q What did you do with the gyro? What was the
17 job on that?

18 A On the gyro?

19 Q Yes.

20 A Basically, removing old gyro components,
21 putting in new gyro components, mounted to the bulkhead
22 and things that I need to. Rerouting cables, testing
23 the cables, making sure that they were okay to reuse
24 again.

25 And I did not land any cables, any

1 conductors. They were going to have the tech rep, from
2 Sperry Mr... do that. So I just got him to where he
3 was supposed to go so he could come in with that. And
4 that was the nature of that.

5 Q Did you do any testing on the work? How do
6 you guys usually do your quality assurance after you
7 finish the job? How's that stuff normally tested? Do
8 you have a test memo that you would follow?

9 A Yes, they have some of the test memos.
10 ~~Normally~~Of which, you would do an installation test on
11 the cable, identify the ~~f~~cable, things of that nature.

12 Take a resistance reading on them.

13 Q That was normally specified in a memo, or did
14 you just kind of did that --

15 A That was specified. But I would just do it
16 anyway.

17 Q Yes, a lot of it you'd know to do anyway,
18 right?

19 A Right.

20 Q How much supervision did you have from Coast
21 Guard and the ship's owner, the Marine Highway -- the
22 Alaska Marine Highway System?

23 A Supervision here, you mean?

24 A Yes, while you were working.

25 A Oh, we don't get any.

1 Q Did you ever see those guys walking around
2 checking your work?

3 A They would look at us.

4 Q Yes, every once in a while, you'd see them
5 walking around.

6 A Yes.

7 Q How about Coast Guard? Did you ever see
8 Coast Guard on the vessel?

9 A Yes, I'd see them.

10 Q Periodically?

11 A Yeah.

12 MR. ROTHROPEROTH-ROFFY: Okay. I think I'm
13 pretty well done. If I could just get your mailing
14 address and your phone number for the record so in case
15 anything else comes up, we can give you a call?

16 MR. LAWRENCE: My mailing address is 635
17 Dermount.

18 MR. ROTHROPEROTH-ROFFY: Dermount? D-e-?

19 MR. LAWRENCE: Dermount, M-o-u-n-t. D-e-r-m-
20 o-u-n-t.

21 MR. ROTHROPEROTH-ROFFY: Street.

22 MR. LAWRENCE: Street.

23 MR. ROTHROPEROTH-ROFFY: Ketchikan?

24 MR. LAWRENCE: Correct.

25 MR. ROTHROPEROTH-ROFFY: Alaska. And the

1 zip?

2 MR. LAWRENCE: 99901.

3 MR. ROTHROPEROTH-ROFFY: And your phone?

4 MR. LAWRENCE: 907-247-2511.

5 MR. ROTHROPEROTH-ROFFY: Okay. I think that
6 will do it. If there's anything, you know, later on,
7 if there's anything you think -- that occurs to you
8 that might be in some way bearing on this, if you could
9 give us a call, we would really appreciate that.

10 MR. LAWRENCE: ~~To the work every day~~ As to the
11 work we did?

12 MR. ROTHROPEROTH-ROFFY: Yes.

13 MR. LAWRENCE: I couldn't see where I would
14 attribute to anything that's a fire. I can't possibly
15 fathom it unless in their switchboard bus bar -- if
16 their switchboard bus bars were not rated for the load
17 that we were putting on to it, that could possibly
18 cause it.

19 But, however, it would be not true because
20 the power is virtually dead until you use the
21 equipment. And there was no need to use the life-
22 saving equipment.

23 So that could not have imposed such a load
24 under the main switchboard to have caused a fire. So
25 it had to be something else in the equipment, such as

1 breakers or something like that.

2 I thought the switchboard was pretty dirty.

3 It could have been that.

4 BY THE INTERVIEWER:

5 Q The switchboard was dirty?

6 A Yeah, I thought it was pretty dirty.

7 Q Before you started working on it?

8 A Before and after, yeah.

9 Q Before and after?

10 A Yes. There was no provision to clean.

11 Q Oh, really?

12 A Right.

13 Q Any chance that one of the electricians left
14 something inside there?

15 A I don't know. I wasn't there that evening.
16 I couldn't say. But that is a possibility that someone
17 could have brushed against something, or something
18 could have fallen off. I'm sure it was dark. ~~It was~~
19 aWe were dark ship.

20 How it had to be done, all they had were
21 probably minimal flashlights or something like that.

22 Q Oh, when they were doing the work, it was
23 dark in that switchboard?

24 A Oh, yeah. Oh, yes. Very dark.

25 Q Did they string temporary power down there?

1 A I don't know, but they probably did. I
2 wouldn't think they would do up anything other than to
3 do that. They probably did string some lights down
4 there.

5 You know, that dark was very much. When the
6 whole ship is dark, you've got a few lights around here
7 and there.

8 I just don't see how the work that we did
9 could possibly create such a -- there's no way, what we
10 did, unless we accidentally hit something that was not
11 associated with what we installed, you know.

12 Q Right.

13 A You know, by going behind there. That's
14 about all I can say.

15 MR. ROTHROPEROTH-ROFFY: Okay. All right, I
16 think I'll just turn this off. I really appreciate you
17 coming down and talking to us.

18 This concludes the interview with Mr. Charles
19 Lawrence, maintenance electrician.

20 (Whereupon, the interview was concluded.)